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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/913,157

08/10/2001

Katsumi Tsukamoto

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3642

6449

7590

11/03/2004

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT

PAPER NUMBER

2686

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/913,157

Applicant(s)

TSUKAMOTO ET AL.

Examiner

Joy K Contee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 0713.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.
2. Examiner asserts that respect to dependent claims 5 and 11, Levanon, U.S. Patent No.6,369,754 does qualify as prior art because the effective filing date relies on the related US Application, Provisional Application No. 60/127,623, filed on April 1, 1999.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
4. Claims 1, 2 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi, U.S. Patent No. 5,898,926, in view of Reed et al. (Reed), U.S. Patent No. 5,634,206.

Regarding claims 1 and 7, Konishi discloses a cell switching device (and method) comprising:

a field intensity measuring device that measures a field intensity of signals from each of a plurality base stations adjacent to a base station servicing a mobile station (col. 2, lines 36-60); and

a switching device that receives results of the measurements provided by said measuring device, when the field intensity of a measured base station exceeds a reference intensity, switches to that base station for communication with the mobile station (col. 2, lines 49-65).

Konishi fails to disclose: a control device that adjusts a time interval for field intensity measurement, in the measuring device, with respect to the base stations, taking into consideration an increasing or decreasing tendency of the field intensity with respect to the base stations measured by the measuring device.

In a similar field of endeavor, Reed discloses adjusts a time interval for field intensity measurement, in the measuring device, with respect to the base stations, taking into consideration an increasing or decreasing tendency of the field intensity (reads on adjusting the average interval to get accurate measures of RSSI under various conditions) (col. 4, lines 27-67).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi to include adjusting the averaging interval for the purpose of obtaining accurate measurements under multi-path fluctuation.

Regarding claims 2 and 8, Konish as modified by Reed discloses the cell switching device (and method) according to claims 1 and 7, respectively, characterized in that:

said control means reduces the time interval for field intensity measurement with respect to a base station as the field intensity undergoes an increase, and extends the

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time interval for field intensity measurement with respect to the base station as the field intensity undergoes a decrease (see Reed, col. 5, lines 40-65).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi to include adjusting the averaging interval for the purpose of obtaining accurate measurements under multi-path fluctuation.

Regarding claim 6, Konishi as modified by Reed discloses the cell switching device according to claim 1, characterized in that:

said control means is provided in the base station (i.e., base station measures its own RSSI) (see Reed, col. 4, lines 8-27).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi to include a back end receiver for the purpose of estimating fading quality in a base station.

5. Claims 3-4 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi, in view of well known prior art.

Regarding claims 3 and 9, O'Neill the cell switching device (and method) according to claims 1 and 7, respectively, but fails to explicitly characterize:

said control means controls the time interval for field intensity measurement with respect to the base stations, taking into consideration absolute values of field intensity with respect to the base stations.

Examiner takes official notice that is well known in the art to take into consideration absolute values of field intensity with respect to the base stations for measuring quality indicators.

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At the time of the invention it would have been obvious to one of ordinary skill in the art to modify O'Neill to take the absolute values of the RSSI with respect to the base stations for the purpose of measurement techniques and conversion therein (e.g., converted dBm to Volts).

Regarding claims 4 and 10, O'Neill discloses the cell switching device (and method) according to claims 3 and 10, but fails to teach said control means reduces the time interval for field intensity measurement with respect to a base station as the absolute value of field intensity with respect to the base station becomes large.

Examiner takes official notice that is well known in the art to taking into consideration absolute values of field intensity with respect to the base stations.

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify O'Neill to take the absolute values of the RSSI with respect to the base stations for the purpose of measurement techniques and conversion therein (e.g., converted dBm to Volts).

6. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konishi and Reed, in view of Levanon, U.S. Patent No. 6,369,754.

Regarding claims 5 and 11, O'Neill discloses the cell switching device (and method) according to claims 1 and 7, respectively, but fails to explicitly characterized in that: said control means controls the time interval for field intensity measurement with respect to a base station, taking into consideration a direction of movement of a satellite.

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In a similar field of endeavor, Levanon discloses taking into consideration a direction of movement of a satellite in making measurements in a system for determining the location of a user terminal (col. 5, line 56 to col. 6, line 17).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Konishi's control means for controlling the time interval for field intensity measurements with respect to a base station, to include positioning satellite in conjunction with the base station system for the purpose of accurately determining the location of a mobile user.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 a.m. to 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.


JC

November 1, 2004


CHARLES APPIAH
PRIMARY EXAMINER